Exhibit C – Capacity

Commonwealth of Massachusetts

ExhibitCCapacityMA.pdf

Grant Oversight and Management Capacity

Massachusetts Executive Office of Housing and Economic Development's Department of Housing and Community Development (DHCD) provides oversight of this contract and its implementation while the MA Executive Office of Energy and Environmental Affairs (EEA) will provide day-to-day management of grant activities. DHCD strengthens cities, towns and neighborhoods and enhances quality of life by providing leadership, professional assistance and financial resources that promote affordable housing, economic vitality of communities and sound municipal management. DCHD is responsible for all MA programs and financial opportunities related to affordable housing, business improvement, community economic development, and community services. It has the relevant project management, quality assurance, financial and procurement, and internal control capacity to quickly launch and implement a major project. DHCD administers HUD's Community Development Block Grant (CDBG) program as well as several other programs benefitting municipalities, private entities, and residents, including low- and moderate-income wage earners. EEA is the Secretariat for the state's 6 environmental and energy agencies, and has extensive expertise in environmental protection and restoration, clean energy, data analysis, water, coastal issues, habitat, recreation, agriculture, forestry, land, fisheries/wildlife, community engagement, design and engineering. The staffs of EEA and its agencies have extensive experience in climate-related science, planning, implementation; EEA developed the state's first Climate Change Adaptation Report. EEA regularly engages stakeholders in participatory policy and project development through it policy office and agency staff. In addition, EEA and its agencies have considerable experience grant and loan administration and oversight.

Partnership Capacity

DHCD, EEA and other state agencies have vast experience coordinating with federal, state, regional, local and private partners. They regularly collaborate on cross-disciplinary issues and work closely with the 351 municipalities across MA. The MA Team has the experience to immediately launch and implement a major effort in Phase 2. Team members offer strong experience in areas such as data

analysis, public works, affordable housing, environmental quality, planning, community engagement, design and engineering, and economic revitalization. If a team member cannot participate, the MA Team has enough depth that another member with similar expertise will be able to fill that gap. Staff from EEA wrote this application.

Cross-Disciplinary Technical Capacity

The MA Team offers multi-disciplinary expertise with state and local government, regional organizations, and academia. Partnership letters can be found in Attachment A.

Leadership Team

DHCD will provide administrative responsibility and ensure that activities under the grant comply with HUD requirements. DHCD has expertise in affordable housing, economic revitalization, economic development, community engagement, and data analysis. *EEA* has expertise in climate change adaptation and mitigation, project scope development, and grant and loan management. It will take the lead role in developing projects and preparing the Phase 2 application and will work with partners and stakeholders to ensure proper project implementation.

MA State Agency Partners

MA Department of Transportation (MassDOT) will implement all projects related to the state transportation infrastructure and will provide technical advice on matters related to highways, bridges, culverts, public transit, infrastructure vulnerability assessments and protection, data analysis, public works, environmental quality, community engagement, design and engineering. MA Department of Public Health (DPH) will work with local communities and their vulnerable populations on issues such as air quality, heat stress, emergency shelter, and communication strategies. MA Emergency Management Agency (MEMA) will provide expertise related to emergency response and disaster recovery through planning, training, and communications. MA Historical Commission identifies, evaluates, and protects important historical and archaeological assets and will provide expertise in ensuring resiliency of historic buildings.

Regional Planning Agencies/Regional Partners

Franklin Regional Council of Governments (FRCOG, 26 communities of Franklin County), Pioneer Valley Planning Commission (PVPC, 43 communities in Hampden and Hampshire counties), Berkshire Regional Planning Commission (BRPC, 32 communities in Berkshire County), Metropolitan Area Planning Council (MAPC, 101 communities in eastern MA), and Martha's Vineyard Commission (MVC, 7 towns of Martha's Vineyard and Gosnold) are regional planning agencies (RPAs) with expertise in planning, environmental quality, energy, emergency preparedness, transportation, housing, economic development, health, data analysis, public works, and community engagement. MAPC, PVPC, BRPC and FRCOG offer extensive experience building on their recently completed 3-year HUD Sustainable Communities regional planning grants. They strengthen the MA Team with innovative approaches to community outreach and engagement via public meetings, workshops, charrettes, surveys and other community involvement. MVC's interests include sea level rise and it has regulatory authority in 6 towns. MA Association of Conservation Districts will be a liaison to local conservation districts and provide community engagement, technical assistance on conservation planning and education, soil surveys, tree seedling sales, training, sediment/erosion control technical assistance, environmental quality, design and engineering. MA Land Trust Coalition will provide land conservation technical services where conservation of buffers can improve flood control and resiliency and will be our liaison to land trusts and conservation organizations in MA. NESCAUM, a not-forprofit organization providing scientific, technical, analytical, and policy support to the air quality and climate programs of the 6 New England states, New Jersey, and New York, will provide expertise related to the development of a climate science clearinghouse to provide decision-makers and practitioners with access to data and analytical tools to assist with climate change planning. Massachusetts Bays National Estuary Program (MassBays), an EPA National Estuary Program dedicated to protecting, restoring, and enhancing the estuarine resources of MA and Cape Cod Bays,

will facilitate partnerships, convene stakeholders, and provide scientific basis for management decisions.

Universities

University of Massachusetts (UMass) at Amherst and Boston will provide expertise in scientific research, engineering, fisheries/wildlife, planning, natural systems, water, infrastructure, urban planning and design, public policy, coastal and ocean sciences, data collection and analysis, computer modeling, climate science, development of scientific information and tools, and includes: at UMass Amherst: the Massachusetts State Geologist; Departments of Geosciences, Environmental Conservation, and Civil and Environmental Engineering; MA Water Resources Research Center, and the federally supported Northeast Climate Science Center (NECSC); and at UMass Boston: the School for the Environment and several associated research facilities. University of New Hampshire (UNH) will provide data analysis, computer modeling of climate change effects, engineering, design and engineering, and public engagement, particularly around sea level rise, coastal surge, and downscaled precipitation and temperature predictions for climate change.

Community Organizations

The Valley Opportunity Council, a non-profit organization that works through-out Hampden County to lift families out of poverty, will with work with partners in implementing planning and analysis, and infrastructure improvements to assist affected communities in Hampden County. MA Rivers Alliance will assist in engaging local watershed associations on issues related to environmental quality, data analysis, public works, public education, community engagement, and watershed restoration and protection. The Boston Harbor Association uses environmental quality, data analysis, public works, education, community engagement to promote restoration and protection of, and access to Boston Harbor and will assist in engaging local businesses, municipalities and residents, particularly on sea level rise and surge.

Municipalities

As Partners, the City of Springfield and Town of Oak Bluffs will guide projects in their communities.

Federal Agency Partners

Although federal agencies cannot be partners, several have indicated their support of the Commonwealth's application and their intent to provide support as it implements its resiliency plan. The *U.S. Environmental Protection Agency (EPA)* will facilitate communication with other New England states, and will bring experience from its Community-Based Water Resiliency initiative, its Sustainable Communities initiative with HUD and U.S. DOT, and environmental protection. *U.S. Geological Survey (USGS)* will research natural resources; undertake data collection, analysis, and computer modeling; develop scientific information, tools, and techniques. *USDA Natural Resources Conservation Service (NRCS)* will provide community engagement and technical assistance to farmers and forest land owners, data analysis, design and engineering.

Multi-Disciplinary Capacity

Nearly every major decision or project conducted by the state requires substantial coordination among affected parties. Past partnerships between state agencies have been strong. Each Team Partner has considerable experience working on projects with stakeholders that include federal, state and local levels of government; academia; regional planning organizations; consulting engineers; not-for-profit organizations; and local residents. Partners have a history of closely coordinating with each other to ensure that their activities are synchronized. As an example, the Global Warming Solutions Act requires MA to reduce greenhouse gas emissions. Led by EEA, the effort engages multiple agencies including MassDOT, EOHED, DPH, and a multi-disciplinary advisory committee representing electric utilities, regional planning agencies, developers, environmentalists, and academicians.

Comprehensive Planning and Complex Program Capacity

Members of the MA Team regularly implement large, complex projects. EEA and its agencies oversee many large grant programs, administering hundreds of millions of dollars in funding for land

conservation, upgrades to water and wastewater infrastructure, dam and seawall removal and repair, green infrastructure, coastal resiliency, urban park, and more. MassDOT conducts long-term planning for development and upgrades to airports, subways, and highways. Collectively, the 5 RPA partners conduct a range of planning and implementation activities with 200 of the state's 351 communities, including environmental, housing, economic development, and transportation.

Technical Capacity to Identify and Assess Science-Based Information

EEA and its agencies have planners, engineers, and scientists with technical capabilities in coastal issues; infrastructure; energy; water resources; pollution and infrastructure; parks and recreation; agriculture; and fisheries and wildlife. UMass-Amherst is host to the NECSC, part of a federal network of 8 Climate Science Centers, which provides scientific information, tools, and techniques related to land, water, wildlife and cultural resources. With its partners, College of Menominee Nation, Columbia U, Marine Biological Laboratory, U of Minnesota, U of Missouri Columbia, U of Wisconsin-Madison, and U.S. Department of Interior agencies, NECSC provides resources for meeting regional needs for climate impact science assessment, education and stakeholder outreach. The MA Team also includes climate researchers, scientists and engineers at UMass Boston and UNH. Other partners work closely with scientists to assess the potential impacts and vulnerabilities of climate change. MassDOT is working with UNH and UMass-Boston to assess vulnerabilities of its infrastructure to sea level rise and coastal surge. Using the results of sophisticated computer modeling, MassDOT is developing alternative strategies to address these impacts, taking into consideration cost, timeframe of impact, project life, and risk. The Boston Harbor Association, in collaboration with the same scientists, published Preparing for a Rising Tide, an examination of the effects of projected sea level rise and coastal surge in Boston.

Civil Rights and Fair Housing Experience

DHCD is committed to creating fair and open access to affordable housing and promoting compliance with state and federal civil rights obligations. In its Affirmative Fair Housing Marketing and Resident

Selection Plan Guidelines, DHCD requires that all privately assisted housing or housing for inclusion on the Subsidized Housing Inventory have an Affirmative Fair Housing Marketing and Resident Selection Plan. With respect to rental housing and Assisted Living Facilities, the affordable Use Restriction documents of said housing must require that the AFHMP, subject to the approval of the subsidizing or funding agency, shall be implemented for the term of the affordability restriction. DHCD has published its Affirmative Fair Housing and Civil Rights Policy and Fair Housing Mission Statement and on its website, lists Principles and Resources for Fair and Affordable Housing in MA. In its Analysis of Impediments to Fair Housing Choice (2014), DHCD analyzes racial and economic disparities, including chapters on The Foreclosure Crisis and Impacts on Families and Neighborhoods of Color and Development with Rental Subsidies for Extremely Low Income Households.

Environmental Justice (EJ) is a high priority in MA. EEA's Secretary issued the state's first-ever EJ Policy in 2002. In November 2014, the Governor issued an Executive Order requiring EEA to update its EJ Policy, creating a new position and an Advisory Council to advise on EJ policies and practices. MA invests significantly into its 26 "Gateway Cities," including Springfield, defined as having median household incomes below the state average, populations greater than 35,000 and less than 250,000, and rates of educational attainment of a bachelor's degree (or higher) that are below the state average. MA's vision is that Gateway Cities actively participate in, and contribute to, the Commonwealth's overall economic success by taking advantage of their distinctive ability to be desirable locations for innovators, entrepreneurs and businesses and places where people choose to live.

Design Quality Capacity

To ensure that Phase 2 includes a design quality that enhances long-term resilience, the MA Team will create an advisory group to assess climate change projections and provide advice on sound, resilient design. In September 2015, NOAA will finalize Atlas 14 Volume 10, an analysis of precipitation frequency that will update Technical Paper 40 (published in 1961). Rainfall frequency has intensified

significantly since 1961; today a 100-year 24-hour storm in MA is estimated to be 8.0 to 8.5 inches compared to 6.5 inches. The lower rainfall is currently used in our federally funded highway projects, leading to under-sized drainage systems that compromise roads and culverts during intense rain. Once the Atlas is finalized, it will be included in updated design standards, the MA Stormwater Handbook, and possibly an updated MA Stream Crossings Handbook, which provides guidance on minimizing impacts to aquatic habitat while constructing roadways. The MA Team's capacity to design or plan for long-term resilience is informed by our Partners, especially those who are able to help translate climate science into usable, practical design standards, including NECSC, UMass, UNH, and MassDOT.

Capacity to Determine Reasonable Cost

DHCD, EEA and MassDOT are highly experienced in soliciting and reviewing bids for complex projects with large budgets and selecting contractors based on the combination of their abilities to successfully complete the job at the lowest cost, following state law on bidding procedures. EEA's agency Department of Conservation and Recreation administers FEMA's Hazard Mitigation Program and MassDOT is familiar with cost efficiency analyses. In an especially complicated and costly project, the state agencies may also consider using a value engineering consultant to assess and reduce project costs while ensuring that the project will function as intended.

Community Engagement Capacity

The MA Team has strong experience engaging community stakeholders and is committed to implementing a robust public process throughout this project. All state agencies coordinate closely with stakeholders, engaging them during development of strategies and approaches. EEA convened over 200 stakeholders in the development of the 2011 MA Climate Change Adaptation Report, and met with stakeholders over 5 years, and held over 50 committee and workgroup meetings and several targeted stakeholder meetings to develop the Sustainable Water Management Initiative (SWMI). Also, four planning agency partners recently completed 3-year HUD Sustainable Communities regional planning grants that emphasized and relied on extensive and innovative community outreach and

engagement. Techniques included innovative meeting design, open houses, public meetings, workshops, charrettes, surveys and participatory technology. Special efforts were made to engage nontraditional planning partners and vulnerable populations including residents with limited English proficiency and renters during these planning processes. In the past year, EEA, FRCOG, BRPC, and Franklin Land Trust completed 23 public meetings across the Deerfield and Hoosic watersheds and formed a 20-town advisory committee with representatives from each town and 8 regional environmental and business organizations that are meeting to complete a regional conservation and economic development plan. EEA's Office of Coastal Zone Management (CZM) StormSmart Coasts program engages local officials and property owners, providing information, strategies, and tools to help communities and people working and living on the coast address the challenges of erosion, flooding, storms, sea level rise, and other climate change impacts. CZM publishes technical guidance, conducts pilot projects, and provides funding to enable floodplain management along the coast, reduce coastal erosion and storm damage while minimizing impacts to the shoreline and neighboring properties, and conduct vulnerability assessments.

Throughout development of this Phase 1 proposal, the MA Team has sought stakeholder involvement through 2 public hearings, a written comment period, meetings, emails and telephone calls. An even more robust process is planned for the Phase 2 proposal, when the MA Team will have another public notification period during which stakeholders will offer additional candidate target areas. The Team will work with target areas to develop projects for inclusion in the Phase 2 application. During Phase 2, the Team will create a multi-disciplinary, multi-stakeholder advisory group to share information, enhance planning efforts across multiple jurisdictions, share resources, and foster better understanding of climate predictions, impacts and tools for better implementation of resiliency and mitigation efforts. The Team will also facilitate project-specific stakeholder involvement, drawing from its extensive experience of stakeholders to ensure that projects are effective and beneficial to communities.

Capacity to Work with Community Leaders

DHCD and EEA have completed hundreds of HUD CDBG and park construction grants, respectively, over the past several years. The agencies have sought partnerships with all types of community leaders, ranging from the city mayors and state representatives to community-based organizations. The MA Team is experienced in implementing complex and controversial projects that involve divergent points of view and the need to work with affected parties to develop solutions amenable to all.

Regional or Multi-Governmental Capacity

Drawing from the experience of the state agencies; the five regional planning agencies that represent 200 Massachusetts communities; and NESCAUM with affiliations with other New England states, New York, and regions of Canada; and federal agencies, the Team has a strong capacity to work regionally, extending well beyond its target areas. Team members can reach large regional audiences, as demonstrated by the 4 HUD Sustainable Regional Plans that used grassroots engagement to address regional land use, natural resources, economic development, equity, and infrastructure problems. The Deerfield/Hoosic natural resources and economic development initiative reached large regional areas using grassroots and involved coordination of 2 regional planning agencies with state and local government and non-profit organizations. While the Team may implement specific HUD-funded recovery measures in the target areas, the Team partners will promote resiliency project results, strategies and tools in these target areas and throughout the entire state.